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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,254	01/04/2002	Thierry Valet	59559-8017.US01	9462

22918 7590 02/11/2011

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EXAMINER	
PIZIALI, JEFFREY J	

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
02/11/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentprocurement@perkinscoie.com

Office Action Summary	Application No.	Applicant(s)	
	10/040,254	VALET, THIERRY	
	Examiner	Art Unit	
	Jeff Piziali	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 August 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,8 and 25-38* is/are pending in the application.

4a) Of the above claim(s) *38* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8 and 25-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 September 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 25 August 2010 has been entered.

Election/Restrictions

2. As explained in the previous Office action (see page 2 of the Office action mailed on 25 February 2010), claim 38 is directed to a species that is independent or distinct from the species elected on 7 May 2007 for the following reasons:

A Restriction Requirement was mailed on 25 July 2006 directed to the following patentably distinct species:

> **Species I**, drawn to a handheld computer device having a motion sensor embedded within the device [see Page 7, Line 32 - Page 8, Line 2 of the instant Specification, for instance], and

Species II, drawn to a handheld computer device having an add-on attachment which incorporates a motion sensor [see Fig. 3; Page 7, Lines 29-31 of the instant Specification, for instance].

The Applicant elected **Species I** (without traverse) on 7 May 2007.

Claim 38 is directed to non-elected **Species II**.

Accordingly, **claim 38 is withdrawn** from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-5, 8, and 25-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

Claim 1 recites, "**the movement is used to control the display device**" (line 6).

Claim 1 recites, "**the accelerometer chip is slanted with respect to the circuit board**" (line 8).

Claim 4 recites, "**the first non-zero angle between the accelerometer chip and the circuit board is selected to decrease the Z footprint of the hand-held device**" (line 1).

Claim 8 recites, "**the first non-zero angle is a slanted angle between the accelerometer chip and the circuit board**" (line 2).

Claim 25 recites, "**the accelerometer chip is mounted on a circuit board in the hand-held device in a slanted fashion**" (line 4).

Claim 25 recites, "**the movement is used to control the display device**" (line 8).

Claim 26 recites, "**movement of said hand-held device controls an orientation of an object displayed on said display device**" (line 1).

Claim 29 recites, "**the angle theta is selected to optimize height of the hand-held device**" (line 1).

Claim 32 recites, "**the angle phi is selected to optimize height of the hand-held device**" (line 1).

Claim 33 recites, "**the movements are used by the processor to control an orientation of an object viewed on said display**" (line 6).

Claim 35 recites, "**the angle theta and the angle phi are selected to decrease a Z footprint of the device**" (line 1).

Claim 36 recites, "**the angle theta and the angle phi are selected to optimize a size of the device**" (line 2).

However, the original disclosure merely teaches, "Central to this invention is the concept that motion of a display device controls an object viewer, where the object being viewed is typically essentially stationary in virtual space in the plane surrounding the display device... The hand held computer 20 is considered to have a processor internal to the case 20 controlling the display device 28. The motion sensor incorporated in attachment 60, or possibly found internal to the hand held device, would preferably include a mechanism providing the internal processor with a motion vector measurement" (see page 7, line 23 - page 8, line 7).

Moreover, the original disclosure only teaches, "The angle of the accelerometer chip is optimized for height and size constraints of the device in which it is placed." (see page 4, line 6).

Additionally, the original disclosure only teaches, "minimizing the Z footprint" (see page 9, line 11).

The original disclosure does not appear to anywhere teach such subject matter as using movement to control the display.

The original disclosure does not appear to anywhere teach such subject matter as a slanted angle.

The original disclosure does not appear to anywhere teach such subject matter as decreasing a Z footprint.

The original disclosure does not appear to anywhere teach such subject matter as hand-held device movement controlling the orientation of a displayed object.

The original disclosure does not appear to anywhere teach such subject matter as the processor using movements to control the orientation of a object viewed on the display.

The original disclosure does not appear to anywhere teach such subject matter as selecting an angle to optimize the size/height of the hand-held device.

5. Claims 1-5, 8, and 25-37 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement.

The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 1 recites, "**the movement is used to control the display device**" (line 6).

Claim 4 recites, "**the first non-zero angle between the accelerometer chip and the circuit board is selected to decrease the Z footprint of the hand-held device**" (line 1).

Claim 5 recites, "**the movement of said hand held device controls an orientation of an object displayed on said display device**" (line 2).

Claim 25 recites, "**the movement is used to control the display device**" (line 8).

Claim 26 recites, "**movement of said hand-held device controls an orientation of an object displayed on said display device**" (line 1).

Claim 29 recites, "**the angle theta is selected to optimize height of the hand-held device**" (line 1).

Claim 32 recites, "**the angle phi is selected to optimize height of the hand-held device**" (line 1).

Claim 33 recites, "**the movements are used by the processor to control an orientation of an object viewed on said display**" (line 6).

Claim 35 recites, "**the angle theta and the angle phi are selected to decrease a Z footprint of the device**" (line 1).

Claim 36 recites, "**the angle theta and the angle phi are selected to optimize a size of the device**" (line 2).

However, the original disclosure merely teaches, "Central to this invention is the concept that motion of a display device controls an object viewer, where the object being viewed is typically essentially stationary in virtual space in the plane surrounding the display device... The hand held computer 20 is considered to have a processor internal to the case 20 controlling the display device 28. The motion sensor incorporated in attachment 60, or possibly found internal to the hand held device, would preferably include a mechanism providing the internal processor with a motion vector measurement" (see page 7, line 23 - page 8, line 7).

Moreover, the original disclosure only teaches, "The angle of the accelerometer chip is optimized for height and size constraints of the device in which it is placed." (see page 4, line 6).

Additionally, the original disclosure only teaches, "minimizing the Z footprint" (see page 9, line 11).

The original disclosure does not appear to be enabling for the subject matter of using movement to control the display.

The original disclosure does not appear to be enabling for the subject matter of a slanted angle.

The original disclosure does not appear to be enabling for the subject matter of decreasing a Z footprint.

The original disclosure does not appear to be enabling for the subject matter of hand-held device movement controlling the orientation of a displayed object.

The original disclosure does not appear to be enabling for the subject matter of the processor using movements to control the orientation of a object viewed on the display.

The original disclosure does not appear to be enabling for the subject matter of selecting an angle to optimize the size/height of the hand-held device.

6. Claims 1-5, 8, and 25-37 are rejected under 35 U.S.C. 112, first paragraph, because the specification does not reasonably provide enablement (scope of enablement) for the following subject matter:

Claim 1 recites, "**more than one plane of motion**" (line 5).

Claim 1 recites, "**a first non-zero angle to a first plane parallel to the circuit board**" (line 8).

Claim 2 recites, "**a second non-zero angle with respect to a second plane perpendicular to the circuit board**" (line 2).

Claim 25 recites, "**more than one plane of motion**" (line 8).

Claim 27 recites, "**an angle theta with respect to a plane parallel to the circuit board**" (line 2).

Claim 28 recites, "**more than one plane of motion**" (line 2).

Claim 30 recites, "**an angle phi with respect to a plane perpendicular to the circuit board**" (line 2).

Claim 30 recites, "**an angle theta is non-zero and non-orthogonal with respect to the plane perpendicular to the circuit board**" (line 4).

Claim 31 recites, "**more than one plane of motion**" (line 2).

Claim 33 recites, "**more than one plane of motion**" (line 6).

Claim 33 recites, "**an angle theta with respect to a first plane parallel to the circuit board**" (line 9).

Claim 34 recites, "**an angle phi with respect to a plane perpendicular to the circuit board**" (line 2).

The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention commensurate in scope with these claims.

Each of the above claimed "planes" and "angles (relative to planes)" is a purely functional recitation with no limitation of structure.

See Ex parte Miyazaki (BPAI Precedential 19 November 2008).

7. The remaining claims are rejected under 35 U.S.C. 112, first paragraph, as being dependent upon rejected base claims.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-5, 8, and 25-37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 1 recites the limitation "**movement**" (line 4). There is insufficient antecedent basis for this limitation in the claim.

11. Claims 1, 2, 25, 27, 28, 30, 31, 33, and 34 are amenable to two or more plausible claim constructions.

Claim 1 recites, "**more than one plane of motion**" (line 5).

Claim 1 recites, "**a first non-zero angle to a first plane parallel to the circuit board**" (line 8).

Claim 2 recites, "**a second non-zero angle with respect to a second plane perpendicular to the circuit board**" (line 2).

Claim 25 recites, "**more than one plane of motion**" (line 8).

Claim 27 recites, "**an angle theta with respect to a plane parallel to the circuit board**" (line 2).

Claim 28 recites, "**more than one plane of motion**" (line 2).

Claim 30 recites, "**an angle phi with respect to a plane perpendicular to the circuit board**" (line 2).

Claim 30 recites, "**an angle theta is non-zero and non-orthogonal with respect to the plane perpendicular to the circuit board**" (line 4).

Claim 31 recites, "**more than one plane of motion**" (line 2).

Claim 33 recites, "**more than one plane of motion**" (line 6).

Claim 33 recites, "**an angle theta with respect to a first plane parallel to the circuit board**" (line 9).

Claim 34 recites, "**an angle phi with respect to a plane perpendicular to the circuit board**" (line 2).

The use of the phrase "**plane**" and "**angle (relative to a plane)**" renders the claims indefinite.

Each claimed "**plane**" and "**angle (relative to a plane)**" is amenable to two or more plausible definitions.

Neither the Specification, nor the claims, nor the ordinary meanings of the words provides any guidance as to what Applicant intends to cover with this claim language.

Due to the ambiguity as to what is intended by the claimed "**plane**" and "**angle (relative to a plane)**" and the fact that this claim element is amenable to two or more plausible claim constructions, this claim is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that the Applicant considers to be the invention.

See Ex parte Miyazaki (BPAI Precedential 19 November 2008).

12. Claim 1 provides for "**the movement is used to control the display device**" (line 6), but, since the claim does not set forth any steps involved in this method/process, it is unclear what method/process applicant is intending to encompass.

Claim 25 provides for "**the movement is used to control the display device**" (line 8), but, since the claim does not set forth any steps involved in this method/process, it is unclear what method/process applicant is intending to encompass.

Claim 33 provides for "**the movements are used by the processor to control an orientation of an object viewed on said display**" (line 6), but, since the claim does not set forth any steps involved in this method/process, it is unclear what method/process applicant is intending to encompass.

A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

13. Claims 2-5 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**a hand held device**" (claim 1, line 1) and "**a hand held device**" (claims 2-5 and 8, line 1).

It would be unclear to one having ordinary skill in the art whether the above limitations are intended to be identical to, or distinct from, one another.

14. Claim 3 recites the limitation "**the hand held device**" (line 2). There is insufficient antecedent basis for this limitation in the claim.

15. Claim 4 recites the limitation "**the first non-zero angle between the accelerometer chip and the circuit board**" (line 1). There is insufficient antecedent basis for this limitation in the claim.

16. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**the first non-zero angle between the accelerometer chip and the circuit board is selected to decrease the Z footprint of the hand-held device**" (line 1).

It would be unclear to one having ordinary skill in the art what claim element(s), if any, are intended to perform such a selection.

17. Claim 4 recites the limitation "**decrease a Z footprint**" (line 3). There is insufficient antecedent basis for this limitation in the claim.

It would be unclear to one having ordinary skill in the art what such a "Z footprint" is decreased relative to. Decreased relative to what?

18. Claim 4 recites the limitation "**the hand-held device**" (line 3). There is insufficient antecedent basis for this limitation in the claim.

19. Claim 5 recites the limitation "**said hand held device**" (line 2). There is insufficient antecedent basis for this limitation in the claim.

20. Claim 25 recites the limitation "**a slanted fashion**" (line 5). The addition of the word "**fashion**" to an otherwise definite expression extends the scope of the expression so as to render it indefinite. Ex parte Copenhaver, 109 USPQ 118 (Bd. App. 1955). It would be unclear to one having ordinary skill in the art what "**fashion**" is intended to convey. See MPEP 2173.05(b).

21. Claim 25 recites the limitation "**movement**" (line 4). There is insufficient antecedent basis for this limitation in the claim.

22. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**movement**" (claim 25, line 7) and "**movement**" (claim 26, line 1).

It would be unclear to one having ordinary skill in the art whether the above limitations are intended to be identical to, or distinct from, one another.

23. Claim 28 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**the angle theta is selected to sense movement of the hand-held device in more than one plane of motion**" (line 1).

It would be unclear to one having ordinary skill in the art what claim element(s), if any, are intended to perform such a selection.

An omitted structural cooperative relationship results from the claimed subject matter: "**movement**" (claim 25, line 7) and "**movement**" (claim 28, line 2).

It would be unclear to one having ordinary skill in the art whether the above limitations are intended to be identical to, or distinct from, one another.

An omitted structural cooperative relationship results from the claimed subject matter: "**more than one plane of motion**" (claim 25, line 8) and "**more than one plane of motion**" (claim 28, line 2).

It would be unclear to one having ordinary skill in the art whether the above limitations are intended to be identical to, or distinct from, one another.

24. Claim 29 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**the angle theta is selected to optimize height of the hand-held device**" (line 1).

It would be unclear to one having ordinary skill in the art what claim element(s), if any, are intended to perform such a selection.

25. The term "**optimize height of the hand-held device**" in claim 29 (line 2) is a relative term which renders the claim indefinite.

The term "**optimize height of the hand-held device**" in claim 32 (line 2) is a relative term which renders the claim indefinite.

The term "**optimize a size of the device**" in claim 36 (line 2) is a relative term which renders the claim indefinite.

The term "**optimize**" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

26. Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**the angle phi is selected to sense movement of the hand-held device in more than one plane of motion**" (line 1).

It would be unclear to one having ordinary skill in the art what claim element(s), if any, are intended to perform such a selection.

An omitted structural cooperative relationship results from the claimed subject matter: "**movement**" (claim 25, line 7) and "**movement**" (claim 31, line 2).

It would be unclear to one having ordinary skill in the art whether the above limitations are intended to be identical to, or distinct from, one another.

An omitted structural cooperative relationship results from the claimed subject matter: "**more than one plane of motion**" (claim 25, line 8) and "**more than one plane of motion**" (claim 31, line 2).

It would be unclear to one having ordinary skill in the art whether the above limitations are intended to be identical to, or distinct from, one another.

27. Claim 32 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**the angle phi is selected to optimize height of the hand-held device**" (line 1).

It would be unclear to one having ordinary skill in the art what claim element(s), if any, are intended to perform such a selection.

28. Claim 35 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**the angle theta and the angle phi are selected to decrease a Z footprint of the device**" (line 1).

It would be unclear to one having ordinary skill in the art what claim element(s), if any, are intended to perform such a selection.

29. Claim 35 recites the limitation "**decrease a Z footprint**" (line 2). There is insufficient antecedent basis for this limitation in the claim.

It would be unclear to one having ordinary skill in the art what such a "Z footprint" is decreased relative to. Decreased relative to what?

30. Claim 36 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

An omitted structural cooperative relationship results from the claimed subject matter: "**the angle theta and the angle phi are selected to optimize a size of the device**" (line 1).

It would be unclear to one having ordinary skill in the art what claim element(s), if any, are intended to perform such a selection.

31. The remaining claims are rejected under 35 U.S.C. 112, second paragraph, as being dependent upon rejected base claims.

Claim Rejections - 35 USC § 103

32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

33. Claims 1-5, 8, and 25-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Feinstein (US 6,466,198 B1)** in view of **Svancarek (US 6,249,274 B1)** and **Darley (US 6,122,340 A)**.

Regarding claim 1, **Feinstein** discloses a hand held device [e.g., Figs. 1A-1C: 10] comprising:

a processor [e.g., Figs. 5, 8, 14, 15: 100] that controls a display device [e.g., Figs. 5, 8: 12] of the hand held device;

a motion sensor [e.g., Figs. 14, 15: 82, 84, 432] mounted on a circuit board [e.g., Figs. 14, 15: 450]; wherein,

the motion sensor is coupled [e.g., Fig. 14: 90, 92, 430] to the processor and

senses movement of the hand held device in more than one plane of motion [e.g., Fig. 14: X-axis, Y-axis, Z-axis];

the movement is used to control the display device (e.g., see Column 5, Lines 24-60); wherein

the motion sensor includes an accelerometer chip [e.g., Figs. 14, 15: 82] mounted at a first angle to a first plane parallel to the circuit board (see the entire document, including Column 13, Lines 14-59).

Feinstein does not appear to expressly disclose an accelerometer chip mounted at a first non-zero angle to a first plane parallel to the circuit board such that the accelerometer chip is slanted with respect to the circuit board.

However, **Svancarek** discloses a hand held device [e.g., Fig. 2: 100] comprising:

a processor [e.g., Fig. 2: 102] that controls a display device [e.g., Fig. 1: 47] (e.g., see Column 1, Lines 17-25);

a motion sensor [e.g., Fig. 2: 104; Figs. 6AB: 180]; wherein,

the motion sensor is coupled [e.g., Fig. 2: via 106] to the processor and

senses movement of the hand held device in more than one plane of motion [e.g., Figs. 6AB: 154, 156];

the movement is used to control the display device (e.g., see Column 1, Lines 17-25); wherein

the motion sensor includes an accelerometer chip [e.g., Figs. 6AB: 180] mounted at a first non-zero angle [e.g., Figs. 6AB: offset 45 degrees] to a first plane [e.g., Figs. 3A, 6AB: X-axis 142] such that the accelerometer chip is slanted with respect to a primary axis of motion [e.g., Figs. 3A, 6AB: X-axis 142] (see the entire document, including Column 6, Lines 63 - Column 7, Line 43).

Feinstein and **Svancarek** are analogous art, because they are from the shared inventive field of hand-held devices using accelerometers to sense motion and control displays.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Svancarek's** accelerometer chip X-axis offsetting/slanting technique to offset/slant **Feinstein's** accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] at a first non-zero angle [e.g., **Svancarek:** Figs. 6AB: offset 45 degrees] to a first plane [e.g., **Feinstein:** Figs. 2, 14, 15: X-axis 36] parallel to the circuit board [e.g., **Feinstein:** Figs. 14, 15: 450] such that the accelerometer chip is slanted with respect to the circuit board, so as to provide a greatly increased range of angles of inclination which can be sensed and a highly linear output without adding any cost to the device [e.g., **Svancarek:** Column 7, Lines 8-30].

Should it be shown that neither **Feinstein** nor **Svancarek** discloses "the motion sensor includes an accelerometer chip mounted at a first non-zero angle to a first plane parallel to the circuit board such that the accelerometer chip is slanted with respect to the circuit board," as instantly claimed, with sufficient specificity:

Darley discloses a motion sensor [e.g., Fig. 7: 100] including an accelerometer chip [e.g., Fig. 7: 704] being mounted at a first non-zero angle [e.g., Fig. 7: acute angle Θ] between the accelerometer chip and a circuit board [e.g., Fig. 7: 700], such that the accelerometer chip is mounted at the first non-zero angle to a first plane parallel to the circuit board such that the accelerometer chip is slanted with respect to the circuit board (see the entire document, including Column 8, Line 62 - Column 9, Line 20).

The Applicant's preferred 19 degree angle is encompassed within **Darley's** acute angle range.

Feinstein, **Svancarek**, and **Darley** are analogous art, because they are from the shared inventive field of devices using accelerometers to sense motion.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Svancarek's** accelerometer chip X-axis offsetting/slanting technique to offset/slant **Feinstein's** accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] to one of **Darley's** non-zero angles [e.g., **Darley:** Fig. 7: Θ]; because **Svancarek** does not teach being limited to only a 45 degree accelerometer offset.

It would have been obvious to one of ordinary skill in the art at the time of invention, because the substitution of one known acute angle (e.g., 19 degrees) offset for another acute angle (e.g., 45 degrees) offset would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

See KSR International Co. v. Teleflex Inc., et al., Docket No. 04-1350 (U.S. 30 April 2007).

Regarding claim 2, **Svancarek** discloses the accelerometer chip is further mounted at a second non-zero angle [e.g., Figs. 6AB: offset 45 degrees] with respect to a second plane [e.g., Figs. 3A, 6AB: Y-axis 140] perpendicular to the primary axis of motion [e.g., Figs. 3A, 6AB: X-axis 142].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Svancarek's** accelerometer chip Y-Axis offsetting/slanting technique to offset/slant **Feinstein's** accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] at a second non-zero angle [e.g., **Svancarek:** Figs. 6AB: offset 45 degrees] to a second plane [e.g., **Feinstein:** Figs. 2, 14, 15: Y-axis 32 or Z-axis 40] perpendicular to the circuit board [e.g., **Feinstein:** Figs. 14, 15: 450], so as to provide an even more greatly increased range of angles of inclination which can be sensed and a highly linear output without adding any cost to the device [e.g., **Svancarek:** Column 7, Lines 8-30].

Regarding claim 3, **Feinstein** discloses the hand held device is a personal digital assistant (e.g., see Column 5, Lines 24-60).

Regarding claim 4, **Feinstein** and **Svancarek's** resultant first non-zero [e.g., **Svancarek:** Figs. 6AB: 45 degree offset] angle between the accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] and the circuit board [e.g., **Feinstein:** Figs. 14, 15: 450] is selected to decrease a Z footprint of the hand-held device (e.g., compared to a 46 or more degree angle between the accelerometer chip and the circuit board).

However, should it be shown that neither **Feinstein** nor **Svancarek** teaches decreasing a Z footprint of the hand-held device with sufficient specificity:

It is noted the instant application states, "It is also a further feature of the instant invention described in both FIGS. 6 and 7 that in order to minimize the physical space of the device (also known as minimizing the Z footprint), the angles 'phi' and 'theta' at which the chip is mounted is 19 degrees with respect to the circuit board" (see page 9, lines 9-12 of the specification).

Svancarek's 45 degree angle is merely one, non-limiting, example offset given by **Svancarek**. It would have been an obvious design choice to mount the accelerometer chip offset angles other than 45 degrees -- including, for example, 19 degrees. As doing so would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Moreover, **Darley** discloses an accelerometer chip [e.g., Fig. 7: 704] being mounted at any acute angle [e.g., Fig. 7: Θ] between the accelerometer chip and a circuit board [e.g., Fig. 7: 700] (see the entire document, including Column 8, Line 62 - Column 9, Line 20).

The Applicant's preferred 19 degree angle is encompassed within **Darley's** acute angle range.

Feinstein, **Svancarek**, and **Darley** are analogous art, because they are from the shared inventive field of devices using accelerometers to sense motion.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Svancarek's** accelerometer chip X-axis offsetting/slanting technique to offset/slant **Feinstein's** accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] to one of **Darley's** acute angles [e.g., **Darley:** Fig. 7: Θ]; because **Svancarek** does not teach being limited to only a 45 degree accelerometer offset.

It would have been obvious to one of ordinary skill in the art at the time of invention, because the substitution of one known acute angle (e.g., 19 degrees) offset for another acute angle (e.g., 45 degrees) offset would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

See KSR International Co. v. Teleflex Inc., et al., Docket No. 04-1350 (U.S. 30 April 2007).

Regarding claim 5, **Feinstein** discloses the movement of said hand held device controls an orientation of an object [e.g., Figs. 1A-1C: 22, 24, 26, 28] displayed on said display device (e.g., see Column 5, Lines 24-60).

Regarding claim 8, the combination of **Feinstein** and **Svancarek** would result in the first non-zero angle being a slanted angle [e.g., **Svancarek:** Figs. 6AB: offset 45 degree angle] between the accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] and the circuit board [e.g., **Feinstein:** Figs. 14, 15: 450].

Regarding claim 25, this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, **Feinstein** discloses a hand-held device [e.g., Figs. 1A-1C: 10], comprising:

a processor [e.g., Figs. 5, 8, 14, 15: 100] that controls a display device [e.g., Figs. 5, 8: 12] of the hand-held device;

an accelerometer chip [e.g., Figs. 14, 15: 82, 84, 432] coupled [e.g., Fig. 14: 90, 92, 430] to the processor; wherein,

the accelerometer chip is mounted on a circuit board [e.g., Figs. 14, 15: 450] in the hand-held device; wherein,

the accelerometer chip senses movement of the hand-held device in more than one plane of motion [e.g., Fig. 14: X-axis, Y-axis, Z-axis] and

the movement is used to control the display device (see the entire document, including Column 13, Lines 14-59).

Feinstein does not appear to expressly disclose an accelerometer chip is mounted on a circuit board in the hand-held device in a slanted fashion that is neither flat nor perpendicular with respect to the circuit board.

However, **Svancarek** discloses a hand-held device [e.g., Fig. 2: 100], comprising:

a processor [e.g., Fig. 2: 102] that controls a display device [e.g., Fig. 1: 47] (e.g., see Column 1, Lines 17-25);

an accelerometer chip [e.g., Fig. 2: 104; Figs. 6AB: 180] coupled [e.g., Fig. 2: via 106] to the processor; wherein,

the accelerometer chip is mounted in the hand-held device in a slanted fashion [e.g., Figs. 6AB: offset 45 degrees] that is neither flat nor perpendicular with respect to a first plane [e.g., Figs. 3A, 6AB: X-axis 142]; wherein,

the accelerometer chip senses movement of the hand-held device in more than one plane of motion [e.g., Figs. 6AB: 154, 156] and

the movement is used to control the display device (see the entire document, including Column 6, Lines 63 - Column 7, Line 43).

Feinstein and **Svancarek** are analogous art, because they are from the shared inventive field of hand-held devices using accelerometers to sense motion and control displays.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Svancarek's** accelerometer chip X-axis offsetting/slanting technique to offset/slant **Feinstein's** accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] so as to be mounted on the circuit board [e.g., **Feinstein:** Figs. 14, 15: 450] in the hand-held device in a slanted fashion [e.g., **Svancarek:** Figs. 6AB: offset 45 degrees] that is neither flat nor perpendicular with respect to the circuit board, so as to provide a greatly increased range of angles of inclination which can be sensed and a highly linear output without adding any cost to the device [e.g., **Svancarek:** Column 7, Lines 8-30].

Should it be shown that neither **Feinstein** nor **Svancarek** discloses "the accelerometer chip is mounted on a circuit board in the hand-held device in a slanted fashion that is neither flat

nor perpendicular with respect to the circuit board," as instantly claimed, with sufficient specificity:

Darley discloses a motion sensor [e.g., Fig. 7: 100] including an accelerometer chip [e.g., Fig. 7: 704] being mounted at any acute angle [e.g., Fig. 7: Θ] between the accelerometer chip and a circuit board [e.g., Fig. 7: 700], such that the accelerometer chip is mounted on the circuit board in the hand-held device in a slanted fashion [e.g., via Fig. 7: Θ] that is neither flat nor perpendicular with respect to the circuit board (see the entire document, including Column 8, Line 62 - Column 9, Line 20).

The Applicant's preferred 19 degree angle is encompassed within **Darley's** acute angle range.

Feinstein, **Svancarek**, and **Darley** are analogous art, because they are from the shared inventive field of devices using accelerometers to sense motion.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Svancarek's** accelerometer chip X-axis offsetting/slanting technique to offset/slant **Feinstein's** accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] to one of **Darley's** non-zero angles [e.g., **Darley:** Fig. 7: Θ]; because **Svancarek** does not teach being limited to only a 45 degree accelerometer offset.

It would have been obvious to one of ordinary skill in the art at the time of invention, because the substitution of one known acute angle (e.g., 19 degrees) offset for another acute angle (e.g., 45 degrees) offset would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

See KSR International Co. v. Teleflex Inc., et al., Docket No. 04-1350 (U.S. 30 April 2007).

Regarding claim 26, **Feinstein** discloses movement of said hand-held device controls an orientation of an object [e.g., Figs. 1A-1C: 22, 24, 26, 28] displayed on said display device (e.g., see Column 5, Lines 24-60).

Regarding claim 27, **Svancarek** discloses the accelerometer chip is mounted at an angle theta [e.g., **Svancarek:** Figs. 6AB: theta = 45 degrees] with respect to a first plane [e.g., Figs. 3A, 6AB: X-axis 142]; wherein,

the angle theta is non-zero and non-orthogonal with respect to the plane (see the entire document, including Column 6, Lines 63 - Column 7, Line 43).

Therefore, combining **Svancarek's** accelerometer chip X-axis offsetting/slanting technique with **Feinstein's** PDA would result in **Feinstein's** accelerometer chip being mounted at a 45 degree angle theta with respect to a plane parallel [e.g., **Feinstein:** Figs. 2, 14, 15: X-axis 36] to the circuit board; wherein, the angle theta is non-zero and non-orthogonal with respect to the plane parallel to the circuit board.

Regarding claim 28, **Svancarek** discloses the angle theta is selected to sense movement of the hand-held device in more than one plane of motion [e.g., Figs. 6AB: 154, 156] (see the entire document, including Column 6, Lines 63 - Column 7, Line 43).

Regarding claim 29, this claim is rejected by the reasoning applied in rejecting claim 4; furthermore, **Feinstein** and **Svancarek's** resultant angle theta [e.g., **Svancarek:** Figs. 6AB: 45 degree offset] is selected to optimize height of the hand-held device (e.g., compared to a 46 or more degree angle between the accelerometer chip and the circuit board).

Regarding claim 30, **Svancarek** discloses the accelerometer chip is mounted at an angle phi [e.g., Figs. 6AB: phi = 45 degrees] with respect to a second plane [e.g., Figs. 3A, 6AB: Y-axis 140] perpendicular to the first plane [e.g., Figs. 3A, 6AB: X-axis 142]; wherein,

an angle theta is non-zero and non-orthogonal with respect to the plane perpendicular to the circuit board (see the entire document, including Column 6, Lines 63 - Column 7, Line 43).

Therefore, combining **Svancarek's** accelerometer chip Y-axis offsetting/slanting technique with **Feinstein's** PDA would result in **Feinstein's** accelerometer chip being mounted at a 45 degree angle phi with respect to a plane [e.g., **Feinstein:** Figs. 2, 14, 15: Y-axis 32 or Z-axis 40] perpendicular to the circuit board; wherein,

the angle theta is non-zero and non-orthogonal with respect to the plane perpendicular to the circuit board.

Regarding claim 31, **Svancarek** discloses the angle phi is selected to sense movement of the hand-held device in more than one plane of motion [e.g., Figs. 6AB: 154, 156] (see the entire document, including Column 6, Lines 63 - Column 7, Line 43).

Regarding claim 32, this claim is rejected by the reasoning applied in rejecting claim 4; furthermore, **Feinstein** and **Svancarek's** resultant angle phi [e.g., **Svancarek:** Figs. 6AB: 45 degree offset] is selected to optimize height of the hand-held device (e.g., compared to a 46 or more degree angle between the accelerometer chip and the circuit board).

Regarding claim 33, this claim is rejected by the reasoning applied in rejecting claims 1 and 25; furthermore, **Feinstein** discloses a device [e.g., Figs. 1A-1C: 10], comprising:

a display [e.g., Figs. 5, 8: 12];

a processor [e.g., Figs. 5, 8, 14, 15: 100] that controls the display of the device;

a motion sensor [e.g., Figs. 14, 15: 82, 84, 432] mounted on a circuit board; wherein,

the motion sensor is coupled [e.g., Fig. 14: 90, 92, 430] to the processor and

senses movements of the device in more than one plane of motion [e.g., Fig. 14: X-axis, Y-axis, Z-axis] and

the movements are used by the processor to control an orientation of an object [e.g., Figs. 1A-1C: 22, 24, 26, 28] viewed on said display (e.g., see Column 5, Lines 24-60); wherein

the motion sensor includes an accelerometer chip [e.g., Figs. 14, 15: 82] mounted at an angle theta with respect to a first plane parallel to the circuit board (see the entire document, including Column 13, Lines 14-59).

Feinstein does not appear to expressly disclose the angle theta is non-zero and non-orthogonal.

However, **Svancarek** discloses a device [e.g., Fig. 2: 100], comprising:

a display [e.g., Fig. 1: 47];

a processor [e.g., Fig. 2: 102] that controls the display of the device (e.g., see Column 1, Lines 17-25);

a motion sensor [e.g., Fig. 2: 104; Figs. 6AB: 180] mounted on the device; wherein,

the motion sensor is coupled [e.g., Fig. 2: via 106] to the processor and

senses movements of the device in more than one plane of motion [e.g., Figs. 6AB: 154, 156] and

the movements are used by the processor to control an orientation of an object [e.g., a cursor or vehicle] viewed on said display (e.g., see Column 1, Lines 17-25); wherein

the motion sensor includes an accelerometer chip [e.g., Figs. 6AB: 180] mounted at an angle theta [e.g., Figs. 6AB: theta = 45 degrees] with respect to a first plane [e.g., Figs. 3A, 6AB: X-axis 142]; wherein,

the angle them is non-zero and non-orthogonal (see the entire document, including Column 6, Lines 63 - Column 7, Line 43).

Feinstein and **Svancarek** are analogous art, because they are from the shared inventive field of hand-held devices using accelerometers to sense motion and control displays.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Svancarek's** accelerometer chip X-axis offsetting/slanting technique to offset/slant **Feinstein's** accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] so as to be mounted

at a 45 degree angle theta with respect to a first plane parallel [e.g., **Feinstein:** Figs. 2, 14, 15: X-axis 36] to the circuit board [e.g., **Feinstein:** Figs. 14, 15: 450]; wherein, the angle them is non-zero and non-orthogonal, so as to provide a greatly increased range of angles of inclination which can be sensed and a highly linear output without adding any cost to the device [e.g., **Svancarek:** Column 7, Lines 8-30].

Should it be shown that neither **Feinstein** nor **Svancarek** discloses "the motion sensor includes an accelerometer chip mounted at an angle theta with respect to a first plane parallel to the circuit board; wherein, the angle theta is non-zero and non-orthogonal," as instantly claimed, with sufficient specificity:

Darley discloses a motion sensor [e.g., Fig. 7: 100] including an accelerometer chip [e.g., Fig. 7: 704] being mounted at any acute angle theta [e.g., Fig. 7: Θ] with respect to a first plane parallel to a circuit board [e.g., Fig. 7: 700]; wherein, the angle theta is non-zero and non-orthogonal (see the entire document, including Column 8, Line 62 - Column 9, Line 20).

The Applicant's preferred 19 degree angle is encompassed within **Darley's** acute angle range.

Feinstein, **Svancarek**, and **Darley** are analogous art, because they are from the shared inventive field of devices using accelerometers to sense motion.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Svancarek's** accelerometer chip X-axis offsetting/slanting technique to offset/slant **Feinstein's** accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] to one of **Darley's**

non-zero angles [e.g., **Darley:** Fig. 7: Θ]; because **Svancarek** does not teach being limited to only a 45 degree accelerometer offset.

It would have been obvious to one of ordinary skill in the art at the time of invention, because the substitution of one known acute angle (e.g., 19 degrees) offset for another acute angle (e.g., 45 degrees) offset would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

See KSR International Co. v. Teleflex Inc., et al., Docket No. 04-1350 (U.S. 30 April 2007).

Regarding claim 34, **Svancarek** discloses the accelerometer chip is mounted at an angle phi [e.g., Figs. 6AB: phi = 45 degrees] with respect to a second plane [e.g., Figs. 3A, 6AB: Y-axis 140] perpendicular to the first plane [e.g., Figs. 3A, 6AB: X-axis 142]; wherein,

the angle theta is non-zero and non-orthogonal (see the entire document, including Column 6, Lines 63 - Column 7, Line 43).

Therefore, combining **Svancarek's** accelerometer chip Y-axis offsetting/slanting technique with **Feinstein's** PDA would result in **Feinstein's** accelerometer chip being mounted at a 45 degree angle phi with respect to a plane [e.g., **Feinstein:** Figs. 2, 14, 15: Y-axis 32 or Z-axis 40] perpendicular to the circuit board; wherein, the angle theta is non-zero and non-orthogonal with respect to the plane perpendicular to the circuit board.

Regarding claim 35, this claim is rejected by the reasoning applied in rejecting claim 4; furthermore, **Feinstein** and **Svancarek's** resultant angle theta [e.g., **Svancarek:** Figs. 6AB: 45 degree offset] and the angle phi [e.g., **Svancarek:** Figs. 6AB: 45 degree offset] are selected to decrease a Z footprint of the device (e.g., compared to a 46 or more degree angle between the accelerometer chip and the circuit board).

Regarding claim 36, this claim is rejected by the reasoning applied in rejecting claim 4; furthermore, **Feinstein** and **Svancarek's** resultant discloses the angle theta [e.g., **Svancarek:** Figs. 6AB: 45 degree offset] and the angle phi [e.g., **Svancarek:** Figs. 6AB: 45 degree offset] are selected to optimize a size of the device (e.g., compared to a 46 or more degree angle between the accelerometer chip and the circuit board).

Regarding claim 37, **Feinstein** discloses the motion sensor is embedded in the device (see the entire document, including Column 13, Lines 14-59).

Response to Arguments

34. Applicant's arguments filed on 25 August 2010 have been fully considered but they are not persuasive.

The Applicant contends, "the original claim 3 as filed (Page 10 of the specification) recites 'wherein the tracked movements are used to control a display' " (see Page 7 of the Response filed on 25 August 2010). However, the examiner respectfully disagrees.

Original dependent claim 3 provided no antecedent basis for "the tracked movements." Moreover, the current claims do not recite "tracked movements" -- or "tracking" anything for that matter.

Original dependent claim 5 on page 10 of the specification does not recite (and therefore provides no support for) the currently claimed subject matter of the movement of said hand held device controls an orientation of an object displayed on said display device.

The original claims make no mention of any "objects" whatsoever.

The original disclosure only teaches, "minimizing the Z footprint" (see page 9, line 11).

The original disclosure does not appear to anywhere teach such subject matter as decreasing a Z footprint.

The original disclosure only teaches, "The angle of the accelerometer chip is optimized for height and size constraints of the device in which it is placed." (see page 4, line 6).

The original disclosure does not appear to anywhere teach such subject matter as selecting an angle to optimize the size/height of the hand-held device.

The Applicant contends, "applicant disagrees with the Office action's position that the 'specification does not provide a standard for ascertaining the requisite degree' for the term 'optimize.' In particular, in one instance, the specification in lines 21-22 of page 9 provides an

example defining the parameters of an optimized angle" (see Page 8 of the Response filed on 25 August 2010). However, the examiner respectfully disagrees.

The term "**optimize**" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

The term "**optimize**" does not appear anywhere on page 9 of the specification.

The Applicant contends, "The device of claim 1, among other features, includes a motion sensor having, 'an accelerometer chip mounted at a first non-zero angle to a first plane parallel to the circuit board such that the accelerometer chip is slanted with respect to the circuit board.' Feinstein and Svancarek, when viewed alone of in combination, do not teach the above emphasized subject matter of claim 1" (see Page 9 of the Response filed on 25 August 2010). However, the examiner respectfully disagrees.

Feinstein discloses a motion sensor [e.g., Figs. 14, 15: 82, 84, 432] including an accelerometer chip [e.g., Figs. 14, 15: 82] mounted at a first angle to a first plane parallel to a circuit board [e.g., Figs. 14, 15: 450] (see the entire document, including Column 13, Lines 14-59).

Feinstein does not appear to expressly disclose an accelerometer chip mounted at a first non-zero angle to a first plane parallel to the circuit board such that the accelerometer chip is slanted with respect to the circuit board.

However, **Svancarek** discloses a motion sensor [e.g., Fig. 2: 104; Figs. 6AB: 180] includes an accelerometer chip [e.g., Figs. 6AB: 180] mounted at a first non-zero angle [e.g., Figs. 6AB: offset 45 degrees] to a first plane [e.g., Figs. 3A, 6AB: X-axis 142] such that the accelerometer chip is slanted with respect to a primary axis of motion [e.g., Figs. 3A, 6AB: X-axis 142] (see the entire document, including Column 6, Lines 63 - Column 7, Line 43).

It would have been obvious to one having ordinary skill in the art at the time of invention to use **Svancarek's** accelerometer chip X-axis offsetting/slanting technique to offset/slant **Feinstein's** accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] at a first non-zero angle [e.g., **Svancarek:** Figs. 6AB: offset 45 degrees] to a first plane [e.g., **Feinstein:** Figs. 2, 14, 15: X-axis 36] parallel to the circuit board [e.g., **Feinstein:** Figs. 14, 15: 450] such that the accelerometer chip is slanted with respect to the circuit board, so as to provide a greatly increased range of angles of inclination which can be sensed and a highly linear output without adding any cost to the device [e.g., **Svancarek:** Column 7, Lines 8-30].

The Applicant contends, "Svancarek also does not teach, disclose, or fairly suggest the claimed subject matter of claim 2" (see Page 10 of the Response filed on 25 August 2010). However, the examiner respectfully disagrees.

Svancarek discloses the accelerometer chip is further mounted at a second non-zero angle [e.g., Figs. 6AB: offset 45 degrees] with respect to a second plane [e.g., Figs. 3A, 6AB: Y-axis 140] perpendicular to the primary axis of motion [e.g., Figs. 3A, 6AB: X-axis 142].

Therefore, it would have been obvious to one having ordinary skill in the art at the time of invention to use **Svancarek's** accelerometer chip Y-Axis offsetting/slanting technique to offset/slant **Feinstein's** accelerometer chip [e.g., **Feinstein:** Figs. 14, 15: 82] at a second non-zero angle [e.g., **Svancarek:** Figs. 6AB: offset 45 degrees] to a second plane [e.g., **Feinstein:** Figs. 2, 14, 15: Y-axis 32 or Z-axis 40] perpendicular to the circuit board [e.g., **Feinstein:** Figs. 14, 15: 450], so as to provide an even more greatly increased range of angles of inclination which can be sensed and a highly linear output without adding any cost to the device [e.g., **Svancarek:** Column 7, Lines 8-30].

In response to applicant's argument that **Darley (US 6,122,340 A)** and **Svancarek (US 6,249,274 B1)** are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

In this case, **Svancarek** and **Darley** are analogous art, because they are from the shared inventive field of positioning/mounting accelerometers at offset angles within hand-held devices so as to sense user motion.

Applicant's arguments with respect to claims 1-5, 8, and 25-37 have been considered but are moot in view of the new ground(s) of rejection.

By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571)272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on (571) 272-7772. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeff Piziali/
Primary Examiner, Art Unit 2629
7 February 2011